

2238 U.S.P.T.O.  
10/656997  
09/05/03

Please type a plus sign (+) inside this box → +

PTO/SB/05 (03-01)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No. 24334-003

First Inventor Andreas Caduff et al.

Title IMPEDANCE SPECTROSCOPY BASED SYSTEMS AND METHODS

Express Mail Label No. EV328709098US; September 5, 2003

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

- Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
- Applicant claims small entity status.  
See 37 CFR 1.27.
- Specification [Total Pages 33]  
(preferred arrangement set forth below)
  - Descriptive title of the Invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
- Drawing(s) (35 U.S.C. 113) [Total Sheets 7]
- Oath or Declaration (UNSIGNED) Total Pages 3
  - a.  Newly executed (original or copy)
  - b.  Copy from a prior application (37 CFR 1.63 (d))  
(for a continuation/divisional with Box 18 completed)
  - i.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
- Application Data Sheet. See 37 CFR 1.76

## ADDRESS TO:

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

7.  CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a.  Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i.  CD-ROM or CD-R (2 copies); or
    - ii.  paper
  - c.  Statements verifying identity of above copies

## ACCOMPANYING APPLICATIONS PARTS

9.  Assignment Papers (cover sheet & document(s))
10.  37 C.F.R. §3.73(b) Statement  Power of (when there is an assignee) Attorney
11.  English Translation Document (if applicable)
12.  Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS Citations
13.  Preliminary Amendment
14.  Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15.  Certified Copy of Priority Document(s) (if foreign priority is claimed)
16.  Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17.  Other:

18. If a CONTINUATING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

Continuation  Divisional  Continuation-in-part (CIP)

of prior application No: 09/980,661, Filed: 11/15/01

Prior application information: Examiner \_\_\_\_\_

Group / Art Unit: \_\_\_\_\_

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

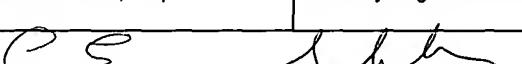
## 17. CORRESPONDENCE ADDRESS

Customer Number or Bar Code Label

30623

or  Correspondence address below

(Insert Customer No. or Attach bar code label here)

Name (Print/Type)	C. Eric Schulman, Esq.	Attorney Registration No.	43,350
Signature		Date	September 5, 2003

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$ 474.00)

Complete if Known	
Application Number	N/A
Filing Date	September 5, 2003
First Named Inventor	Andreas Caduff et al.
Examiner Name	N/A
Group / Art Unit	N/A

Attorney Docket No. 24334-003

METHOD OF PAYMENT (check one)					FEE CALCULATION (continued)																																																																																																																																																																																														
1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:  Deposit Account Number 50-0311					<b>3. ADDITIONAL FEES</b> <table border="1"> <thead> <tr> <th>Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet.</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>400</td><td>216</td><td>200</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>920</td><td>217</td><td>460</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,440</td><td>218</td><td>720</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,960</td><td>228</td><td>980</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>320</td><td>219</td><td>160</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>320</td><td>220</td><td>160</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>280</td><td>221</td><td>140</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>141</td><td>1,280</td><td>241</td><td>640</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1,280</td><td>242</td><td>640</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>460</td><td>243</td><td>230</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>620</td><td>244</td><td>310</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Processing fee under 37 CFR 1.17 (a)</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>740</td><td>246</td><td>370</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>149</td><td>740</td><td>249</td><td>370</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td></td></tr> <tr><td>179</td><td>740</td><td>279</td><td>370</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> <tr><td colspan="5">Other fee (specify) _____</td><td></td></tr> <tr> <td colspan="5">*Reduced by Basic Filing Fee Paid</td> <td>SUBTOTAL (3) (\$ 0)</td> </tr> </tbody> </table>					Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid	105	130	205	65	Surcharge - late filing fee or oath		127	50	227	25	Surcharge - late provisional filing fee or cover sheet.		139	130	139	130	Non-English specification		147	2,520	147	2,520	For filing a request for reexamination		112	920*	112	920*	Requesting publication of SIR prior to Examiner action		113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action		115	110	215	55	Extension for reply within first month		116	400	216	200	Extension for reply within second month		117	920	217	460	Extension for reply within third month		118	1,440	218	720	Extension for reply within fourth month		128	1,960	228	980	Extension for reply within fifth month		119	320	219	160	Notice of Appeal		120	320	220	160	Filing a brief in support of an appeal		121	280	221	140	Request for oral hearing		138	1,510	138	1,510	Petition to institute a public use proceeding		140	110	240	55	Petition to revive - unavoidable		141	1,280	241	640	Petition to revive - unintentional		142	1,280	242	640	Utility issue fee (or reissue)		143	460	243	230	Design issue fee		144	620	244	310	Plant issue fee		122	130	122	130	Petitions to the Commissioner		123	50	123	50	Processing fee under 37 CFR 1.17 (a)		126	180	126	180	Submission of Information Disclosure Stmt		581	40	581	40	Recording each patent assignment per property (times number of properties)		146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))		149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))		179	740	279	370	Request for Continued Examination (RCE)		169	900	169	900	Request for expedited examination of a design application		Other fee (specify) _____						*Reduced by Basic Filing Fee Paid					SUBTOTAL (3) (\$ 0)
Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																																														
105	130	205	65	Surcharge - late filing fee or oath																																																																																																																																																																																															
127	50	227	25	Surcharge - late provisional filing fee or cover sheet.																																																																																																																																																																																															
139	130	139	130	Non-English specification																																																																																																																																																																																															
147	2,520	147	2,520	For filing a request for reexamination																																																																																																																																																																																															
112	920*	112	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																																																															
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																																																															
115	110	215	55	Extension for reply within first month																																																																																																																																																																																															
116	400	216	200	Extension for reply within second month																																																																																																																																																																																															
117	920	217	460	Extension for reply within third month																																																																																																																																																																																															
118	1,440	218	720	Extension for reply within fourth month																																																																																																																																																																																															
128	1,960	228	980	Extension for reply within fifth month																																																																																																																																																																																															
119	320	219	160	Notice of Appeal																																																																																																																																																																																															
120	320	220	160	Filing a brief in support of an appeal																																																																																																																																																																																															
121	280	221	140	Request for oral hearing																																																																																																																																																																																															
138	1,510	138	1,510	Petition to institute a public use proceeding																																																																																																																																																																																															
140	110	240	55	Petition to revive - unavoidable																																																																																																																																																																																															
141	1,280	241	640	Petition to revive - unintentional																																																																																																																																																																																															
142	1,280	242	640	Utility issue fee (or reissue)																																																																																																																																																																																															
143	460	243	230	Design issue fee																																																																																																																																																																																															
144	620	244	310	Plant issue fee																																																																																																																																																																																															
122	130	122	130	Petitions to the Commissioner																																																																																																																																																																																															
123	50	123	50	Processing fee under 37 CFR 1.17 (a)																																																																																																																																																																																															
126	180	126	180	Submission of Information Disclosure Stmt																																																																																																																																																																																															
581	40	581	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																																																															
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))																																																																																																																																																																																															
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))																																																																																																																																																																																															
179	740	279	370	Request for Continued Examination (RCE)																																																																																																																																																																																															
169	900	169	900	Request for expedited examination of a design application																																																																																																																																																																																															
Other fee (specify) _____																																																																																																																																																																																																			
*Reduced by Basic Filing Fee Paid					SUBTOTAL (3) (\$ 0)																																																																																																																																																																																														
2. EXTRA CLAIM FEES  Total Claims 31 - ** = 11 X 9 = 99 Independent Claims 3 - ** = 0 X 0 = 0 Multiple Dependent X = 0																																																																																																																																																																																																			
<table border="1"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Entity Fee (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101</td><td>740</td><td>201</td><td>370</td><td>Utility filing fee</td></tr> <tr><td>106</td><td>330</td><td>206</td><td>165</td><td>Design filing fee</td></tr> <tr><td>107</td><td>510</td><td>207</td><td>255</td><td>Plant filing fee</td></tr> <tr><td>108</td><td>740</td><td>208</td><td>370</td><td>Reissue filing fee</td></tr> <tr><td>114</td><td>160</td><td>214</td><td>80</td><td>Provisional filing fee</td></tr> </tbody> </table>					Large Entity Fee Code (\$)	Entity Fee (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	101	740	201	370	Utility filing fee	106	330	206	165	Design filing fee	107	510	207	255	Plant filing fee	108	740	208	370	Reissue filing fee	114	160	214	80	Provisional filing fee																																																																																																																																																																	
Large Entity Fee Code (\$)	Entity Fee (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid																																																																																																																																																																																															
101	740	201	370	Utility filing fee																																																																																																																																																																																															
106	330	206	165	Design filing fee																																																																																																																																																																																															
107	510	207	255	Plant filing fee																																																																																																																																																																																															
108	740	208	370	Reissue filing fee																																																																																																																																																																																															
114	160	214	80	Provisional filing fee																																																																																																																																																																																															
SUBTOTAL (1) (\$ 375)																																																																																																																																																																																																			
2. EXTRA CLAIM FEES  Total Claims 31 - ** = 11 X 9 = 99 Independent Claims 3 - ** = 0 X 0 = 0 Multiple Dependent X = 0																																																																																																																																																																																																			
<table border="1"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Entity Fee (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>103</td><td>18</td><td>203</td><td>9</td><td>Claims in excess of 20</td></tr> <tr><td>102</td><td>84</td><td>202</td><td>42</td><td>Independent claims in excess of 3</td></tr> <tr><td>104</td><td>280</td><td>204</td><td>140</td><td>Multiple dependent claim, if not paid ** Reissue independent claims over original patent</td></tr> <tr><td>109</td><td>84</td><td>209</td><td>42</td><td>** Reissue claims in excess of 20 and over original patent</td></tr> <tr><td>110</td><td>18</td><td>210</td><td>9</td><td></td></tr> </tbody> </table>					Large Entity Fee Code (\$)	Entity Fee (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	103	18	203	9	Claims in excess of 20	102	84	202	42	Independent claims in excess of 3	104	280	204	140	Multiple dependent claim, if not paid ** Reissue independent claims over original patent	109	84	209	42	** Reissue claims in excess of 20 and over original patent	110	18	210	9																																																																																																																																																																		
Large Entity Fee Code (\$)	Entity Fee (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid																																																																																																																																																																																															
103	18	203	9	Claims in excess of 20																																																																																																																																																																																															
102	84	202	42	Independent claims in excess of 3																																																																																																																																																																																															
104	280	204	140	Multiple dependent claim, if not paid ** Reissue independent claims over original patent																																																																																																																																																																																															
109	84	209	42	** Reissue claims in excess of 20 and over original patent																																																																																																																																																																																															
110	18	210	9																																																																																																																																																																																																
SUBTOTAL (2) (\$ 99.00)																																																																																																																																																																																																			
**or number previously paid, if greater; For Reissues, see above																																																																																																																																																																																																			

SUBMITTED BY						Complete (if applicable)
Name (Print/Type)	C. Eric Schulman, Esq.	Registration No. Attorney/Agent)	43,350	Telephone	1-617-348-3005	
Signature				Date	September 5, 2003	